WHAT IS CLAIMED IS:

1. A method for manufacturing a solid-state imaging device comprising the steps of:

forming a photosensor in the surface of a substrate; and

forming a channel stop section on the side of the photosensor in the substrate by multiple times of ion implantation with multiple implanting energies.

2. A method for manufacturing a solid-state imaging device according to Claim 1, wherein the multiple times of ion implantation are made in multiple implantation areas.

3. A method for manufacturing a solid-state imaging device according to Claim 1, wherein the multiple times of ion implantation are made in an equal implantation area.

4. A method for manufacturing a solid-state imaging device according to Claim 1, wherein the multiple times of ion implantation are made at multiple ion concentrations.

5. A method for manufacturing a solid-state imaging device according to Claim 1, wherein the multiple times of ion implantation are made at an equal ion concentration.

6. A solid-state imaging device comprising:

a photosensor formed in the surface of a substrate; and

a channel stop section formed on the side of the photosensor in the substrate; wherein

the channel stop section has multiple layers across the depth of the substrate.

7. A solid-state imaging device according to Claim 6, wherein the areas of the multiple layers of the channel stop section in the direction perpendicular to the depth direction of the substrate are multiple.

8. A solid-state imaging device according to Claim 6, wherein the areas of the multiple layers of the channel stop section in the direction perpendicular to the depth direction of the substrate are decreased in order along the depth direction.

9. A solid-state imaging device according to Claim 6, wherein the areas of the multiple layers of the channel stop section in the direction perpendicular to the depth direction of the substrate are equal.

10. A solid-state imaging device according to Claim 6,

wherein the ion concentrations of the multiple layers of the channel stop section are multiple.

11. A solid-state imaging device according to Claim 6, wherein the ion concentrations of the multiple layers of the channel stop section are equal.

12. A solid-state imaging device according to Claim 6, wherein the solid-state imaging device is a CCD solid-state imaging device.

13. A solid-state imaging device according to Claim 6, wherein the solid-state imaging device is a CMOS solid-state imaging device.

14. A solid-state imaging device comprising:

a photosensor formed in the surface of a substrate;

a channel stop section formed on the side of the photosensor in the substrate; and

an overflow barrier formed in the substrate;

wherein the channel stop section is in contact with the overflow barrier and has multiple layers across the depth of the substrate.

15. A solid-state imaging device according to Claim 14,

wherein the areas of the multiple layers of the channel stop section in the direction perpendicular to the depth direction of the substrate are multiple.

16. A solid-state imaging device according to Claim 14, wherein the areas of the multiple layers of the channel stop section in the direction perpendicular to the depth direction of the substrate are equal.

17. A solid-state imaging device according to Claim 14, wherein the ion concentrations of the multiple layers of the channel stop section are multiple.

18. A solid-state imaging device according to Claim 14, wherein the ion concentrations of the multiple layers of the channel stop section are equal.

19. A solid-state imaging device according to Claim 14, wherein the solid-state imaging device is a CCD solid-state imaging device.

20. A solid-state imaging device according to Claim 14, wherein the solid-state imaging device is a CMOS solid-state imaging device.